

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hiroyuki HIDAKA

Serial No. 10/538,165

Confirmation No. 9232

Filed: June 8, 2005

For: RADIO COMMUNICATION
TERMINAL AND CONTROL
METHOD

Art Unit: 2617

Examiner: Marivelissse
Santiago Cordero

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is an appeal from the final rejection of claims 3, 4, 7, and 8 in the Office Action dated April 13, 2010. A Notice of Appeal from the final rejection was filed on August 13, 2010 concurrently with a request for pre-appeal appeal brief review.

Notice of Panel Decision from Pre-Appeal Brief Review was issued on September 3, 2010, and claims 3, 4, and 7 were rejected therein.

REAL PARTY IN INTEREST

The real party in interest is KYOCERA CORPORATION.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 3, 4, 7, and 8 are pending and rejected. Claims 1-12, 5, 6, 9, and 10 were canceled without prejudice prior to the final rejection. This Appeal is directed to the rejections of claims 3, 4, 7, and 8.

STATUS OF AMENDMENTS

A Request for Continuing Examination was filed on March 29, 2010 based on claims 3, 4, 7, and 8 in the present form. No claim amendment was filed in the subsequent responses. Therefore, this Appeal is based on the claims as filed on on March 29, 2010. A copy of the claims appear as an Appendix to this Appeal Brief.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is generally directed to a wireless communication terminal and a control method in connection with the terminal communicating and switching between two communication protocols (application's specification at page 1, lines 6-10). Examples of the communication protocols include 1x Evolution Data Only system (1xEVDO) and a Code Division Multiple Access 2000 1x system (cdma2000 1x)(FIG. 1).

Claims 3 and 7 are the independent claims.

Claim 3 is directed a wireless communication terminal communicating using two protocols; it is as follows:

A wireless communication terminal, which performs wireless communication using each of a first communication protocol and a second communication protocol and enables to be in an idle state with both protocols, comprising:

a setting section that sets a suspend time for detecting an incoming call from a base station using the first communication protocol subsequent to completion of communication with the base station using the first communication protocol;

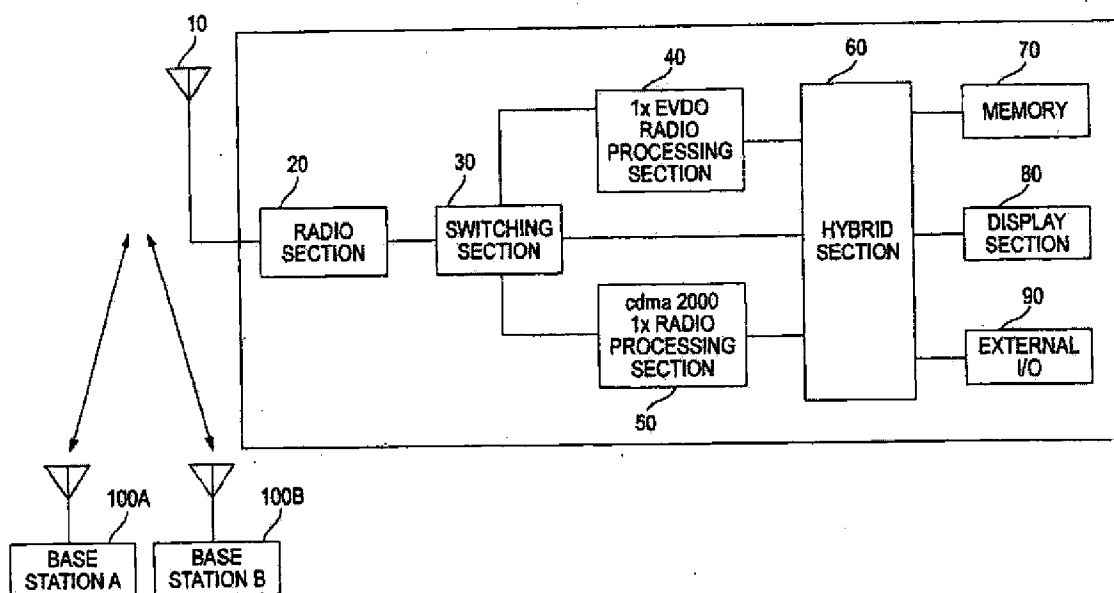
a first changing section that changes a monitoring timing of the second communication protocol; and

a second changing section that changes a monitoring timing of the first communication protocol by communicating with the base station when the first changing section changes the monitoring timing of the second communication protocol;

wherein the setting section does not set the suspend time after the second changing section changes the monitoring timing of the first communication protocol by communicating with the base station.

An example of the terminal and the communication systems can be found in FIG. 1, which is shown below.

FIG. 1

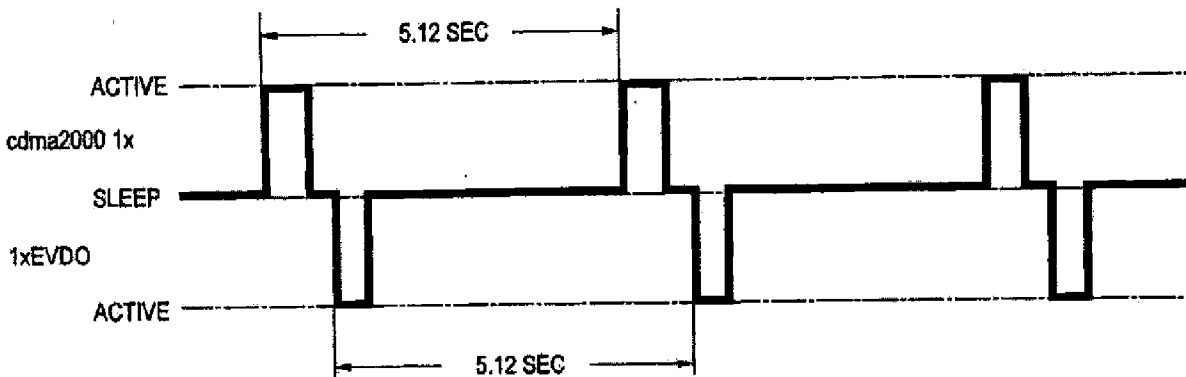


The communication protocols in the example are the 1xEVDO and cdma2000 1x system.

The terminal includes a setting section that sets a suspend time for detecting an incoming call from a base station using the first communication protocol, after completing a communication using the first communication protocol (applicant's specification at page 12, line 15 – page 13, line 11). That is, after completing a communication in the first protocol (for example, the call in the first protocol was interrupted), the terminal does not go immediately to a sleep mode. Instead, the terminal stays in the receiving state for period of time (the suspend time). The receiving state allows the terminal to receive and/or reconnect the call in the first protocol quickly.

The terminal further includes a first changing section that changes a monitoring timing of the second communication protocol. A wireless communication terminal typically switches between communication protocols at set intervals to check for incoming calls using the different protocols. An example of such action is shown in FIG. 2, which is shown below.

FIG. 2



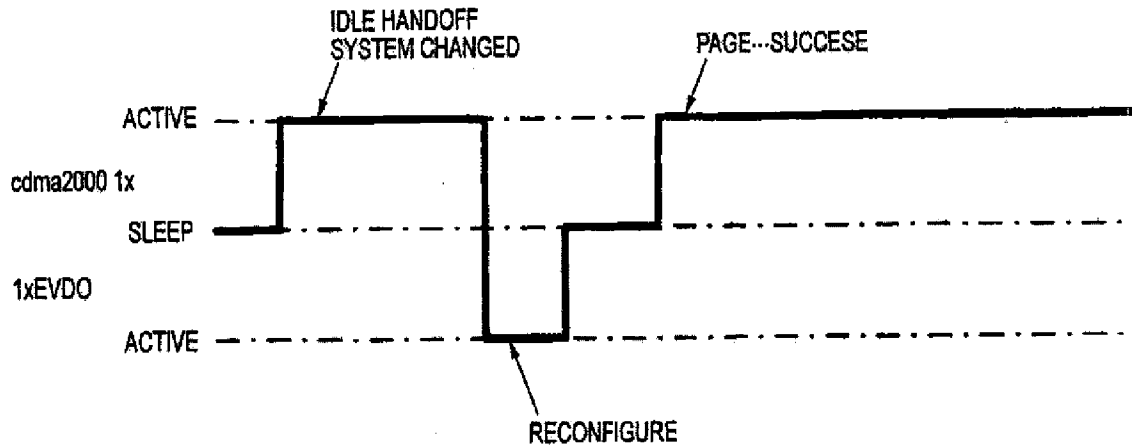
See also applicant's specification at page 11, line 16 – page 12, line 11 and page 1, line 25 – page 2, line 16).

In some cases, those intervals between the switches for monitoring the calls need to be reset. One such example is when the quality of a communication signal deteriorates, requiring the terminal to perform a handoff (switching to another base station of the same communication protocol)(page 2, lines 17 – page 3, line 3).

In this case, the interval for monitoring a call in the other communication protocol would likewise need to be reconfigured, so as not to cause an overlap of the two monitoring periods (id.) Thus, claim 3 requires a second changing section that changes a monitoring timing of the first communication protocol when the first changing section changes the monitoring timing of the second communication protocol.

An example of this case is shown in FIG. 6, which is shown below.

FIG. 6

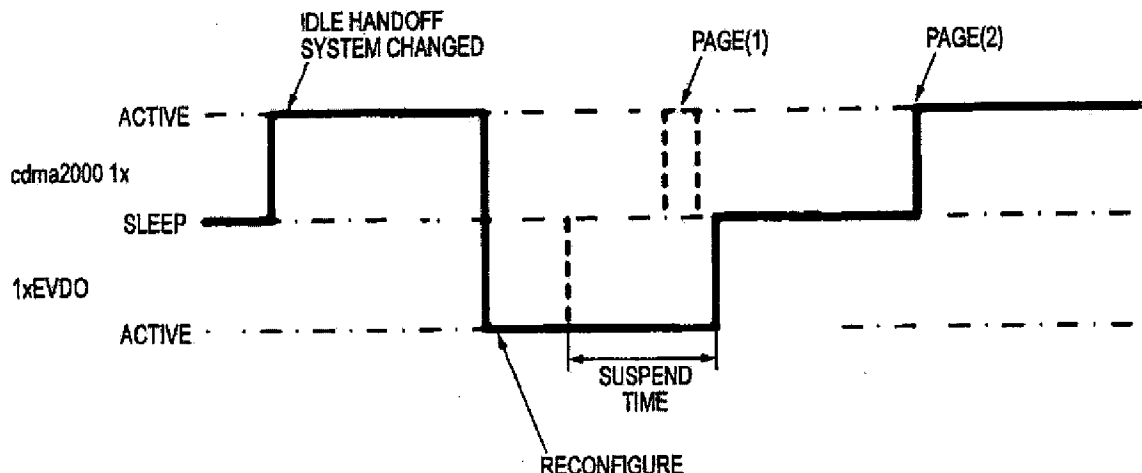


As shown the figure above, the terminal performs a handoff in cdma2000 1x mode, thus changing the monitoring interval of cdma2000 1x mode. The terminal then enters the 1xEVDO mode and reconfigures the monitoring interval for the 1xEVDO mode (page 19, lines 17-22).

Furthermore, claim 3 specifies that in this case, the setting section does not set a suspend time (suspend time = 0). As shown in the figure above, the terminal returns to sleep mode after reconfiguring the monitoring interval of the 1xEVDO mode.

For comparison, FIG. 4 illustrates the case where the suspend time is set under the same condition. FIG. 4 is shown below.

FIG. 4



As shown above, contrary to the terminal of claim 3, this device stays in the 1xEVDO active mode for a period of suspend time after reconfiguring the monitoring interval of the 1xEVDO mode.

Claim 4 depends from claim 3 and provides that the first communication protocol is a 1x Evolution Data Only system, and the second communication protocol is a Code Division Multiple Access 2000 1x system.

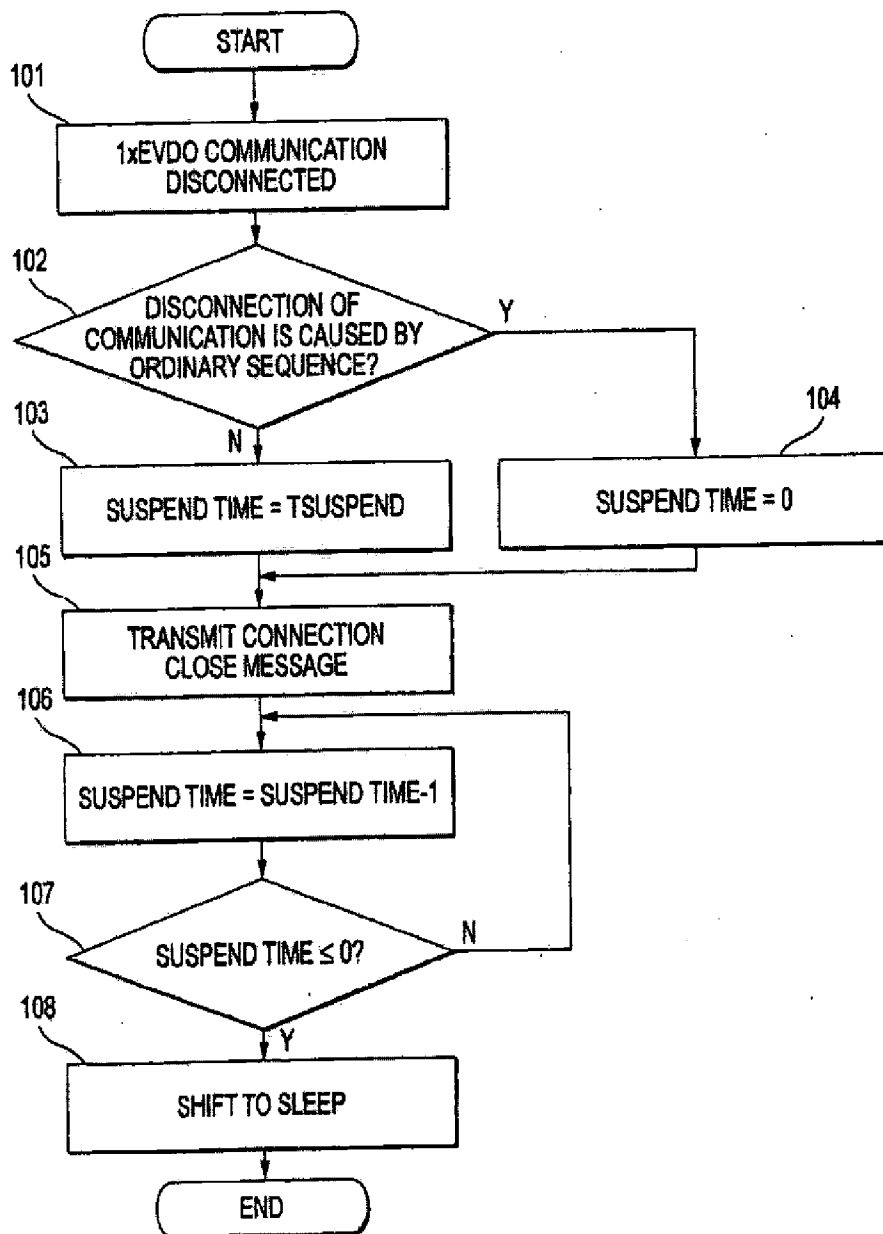
Claim 7 is a method claim reciting a method analogous to claim 3 discussed above. Claim 7 is as follows:

A wireless communication terminal control method which performs wireless communication using each of a first communication protocol and a second communication protocol and enables to be in an idle state with both protocols, comprising:

changing a monitoring timing of the first communication protocol by communicating with a base station based on a change of a monitoring timing of the second communication protocol, and not setting a suspend time for detecting an incoming call from the base station using the first communication protocol after the monitoring time of the first communication protocol is changed by communicating with the base station.

An example of the method claimed is shown in FIG. 5, which is shown below.

FIG. 5



Claim 8 depends from claim 7 and provides that the first communication protocol is a 1x Evolution Data Only system, and the second communication protocol is a Code Division Multiple Access 2000 1x system.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The first issue presented on appeal is whether claims 3, 4, 7, and 8 are obvious under 35 USC 103(a) over FIG. 3C and FIG. 4 of applicant's specification.

ARGUMENT

Claims 3, 4, 7, and 8 are rejected under 35 U.S.C. § 103(a) over FIG. 3C and FIG. 4 of applicant's specification, which the Examiner contends are admitted prior art.

The Examiner erred. FIG. 3C is not admitted prior art because there is no admission specifying that the FIG. 3C is prior art, and the "admission" does not reach the level required for "prior art by admission" under the prevailing legal standard.

Further, even if FIG. 3C were "admitted prior art," FIG. 3C teaches away from the modification required to obtain the present invention. Thus, FIG. 3C cannot be combined with other references to render the claims of present application obvious.

For the above reasons, applicant respectfully submits that the 103(a) rejections of claims 3, 4, 7, and 8 should be withdrawn, and those claims are allowable over the art of record.

I. FIG. 3C Is Not Admitted Prior Art

A. There Is No Admission that FIG. 3C Is Prior Art

The Examiner's case rests entirely on applicant's description of the drawings. At page 7, lines 16-18, the specification describes that "Figs. 3A to 3C are timing charts showing processing performed in the 1xEVDO system during a conventional suspend time."

That description is not an admission that FIG. 3C is prior art. On the contrary, the description, when properly viewed in light of the specification, provides that a non-zero "suspend time" is conventional. FIG. 3C illustrates a timing chart of a system **without the conventional suspend time (this is not disputed by the Examiner)**. Thus, FIG. 3C is not prior art.

B. The Examiner's Assertion Is Beyond the Scope of the "Admission"

It is well accepted that labels alone do not establish a particular feature in the labeled figures as prior art. The "prior art by admission" can only be established by examining the specification and the record as a whole. The Examiner has not done so.

"It is necessary to consider everything appellants have said about what is prior art to determine the exact scope of their admission" (Emphasis added). In re Nomiya, 509 F.2d 566, 571 (CCPA 1975). In that case, two figures were labeled "prior art," and the application repeatedly acknowledged that those figures illustrated prior art (*id.* at FN 6). Even with the prior art label and acknowledgement, the Nomiya court still found that not all features illustrated in those figures constituted prior art by admission. The Court examined the "Description of the Prior Art" in the specification and found portions of the figure were not admitted prior art (*id.*)¹

Additionally, see In re Hellsund, 474 F.2d 1307, 1386 (CCPA 1973). The court stated, "It is pointed out that the disclosure of [patent identified as prior art] is not available in its entirety, **but only insofar as the disclosure therein [is] acknowledged as prior art in the present application.**" Emphasis added. Again, even when a patent is acknowledged as prior art, not all features disclosed in the patent constitute prior art.

As with Hellsund, even if FIGS. 3A-3C were indentified as "timing charts showing processing performed in the 1xEVDO system during a conventional suspend time," not everything illustrated in those figures constituted admitted prior art.

¹ See also Ex parte Shirley, at page 25 (Appeal 2009-2352). BPAI stated, "[W]e are merely noting that the use of alternative characterizations like "related art" and prophylactic prior-art disclaimers, such as the one included in the present Specification, are commonplace in patent prosecution. We are further clarifying that **these alternative characterizations and prior-art disclaimers must be reviewed on a case-by-case basis, and in light of the record as a whole, to determine which disclosures and statements, if any, actually constitute prior-art admissions.**" Emphasis added.

Further, the Examiner failed to "consider everything appellants have said about what is prior art" as required by the Nomiya court. As discussed above, the Examiner's entire position is based on applicant's figure description alone, without considering the specification in its entirety. Accordingly, **the Examiner has failed to meet the legal requirement for establishing FIG. 3C as prior art, and the rejections should be withdrawn.**

Further, Applicant's specification unequivocally establishes that FIG. 3C is not prior art.

In the "Brief Description of the Drawing" section, the specification provides that a conventional system includes a "suspend time" in the operation (page 7, lines 16-17). Further, the original claim 4 provides, "...the setting section does not set the suspend time in a case...." Thus, the specification clearly regards a system having no suspend time as one aspect of its invention, and not prior art.

Additional support can be found in, for example, applicant's specification at page 3, lines 4-14 (the background section). The cited section states:

Incidentally, in the 1xEVDO system, the wireless communication terminal awaits in a measurement status where an incoming signal output from the base station can be received during a certain period of time after completion of communication processing with the base station,... For this reason, the antenna and the radio section are occupied by the 1xEVDO system for a certain period of time after termination of communication.

The cited section indicates that the prior art 1xEVDO system has a non-zero suspend time ("...the antenna and the radio section are occupied by the 1xEVDO system for a certain period of time after termination of communication").

Moreover, applicant's specification at page 17, last paragraph states,

The wireless communication terminal of the present embodiment of the invention is configured such that, in order to solve the problem, the suspend time of the 1xEVDO system is...such that the suspend time is not set when the processing for communication with the base station has ended properly.

The cited section of applicant's specification states that that the "related art" 1xEVDO system has a set (non-zero) suspend time and that only in the present invention is the suspend time not set.

In sum, the specification sets forth that a suspension time is "conventional." FIGS. 3A and 3B are the timing charts during the operation of a conventional suspend time. FIG. 3C, however, does not have a suspend time and thus, is not the timing chart for a conventional system.

Instead of examining the claims as clearly stated in the specification, the Examiner seize upon a generality within the specification and argues that FIG. 3C is prior art by admission. As discussed above, by not examining the record, including the specification, as a whole, the Examiner has failed to meet the requirement legally required to establish that FIG. 3C is prior art by admission. And such assertion is clearly beyond the scope of applicant's "admission."

C. Applicant Should Be Allowed to Rebut the Presumption of "Prior Art"

Alternatively, applicant respectfully requests the Board to allow applicant to overcome the presumption that FIG. 3C being prior art by applicant's affidavit or declaration.

In Ex parte JI-YOUNG LEE, (Appeal 2006-2328), the Board faced with a similar issue in that a figure was not clearly identified as "prior art."² In that case, the Board held that the Examiner could presume such figures were prior art. But, "Appellant can overcome this presumption by an affidavit or declaration of the inventor addressing the legal tests for 'prior art'" (id. at page 42).

² Id. at page 42 states, "The '443 patent does not expressly admit that that the figures now labeled "Background Art" are "Prior Art." The patent refers to Figure 1 as illustrating the construction of an exemplary monitor and Figures 2A-2C as waveform diagrams from the computer system in Figure 1 (col. 2, lines 33-36). Figure 3 is stated to show "the construction of a monitor in accordance with the present invention" (col. 3, line 66 to col. 4, line 1), which suggests that the invention of Figure 3 is an improvement on the subject matter of Figure 1, i.e., that the inventor knew of the subject matter of Figure 1 when making his invention, and that it is prior art to the inventor or, at least, evidence of the level of ordinary skill in the art."

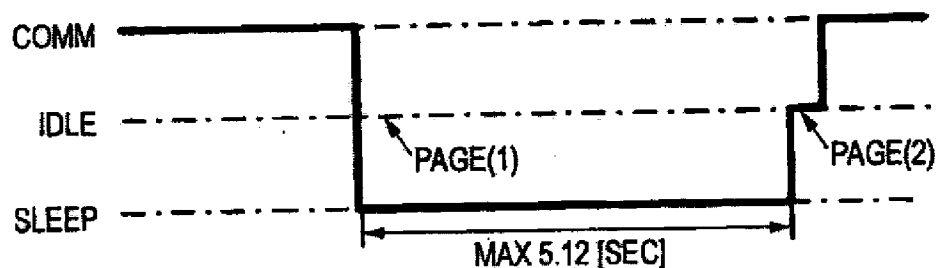
Thus, applicant respectfully submits that the Board adopts the position of the Lee board, and remand to allow applicant to overcome the presumption that FIG. 3C being prior art by affidavit or declaration.

I. FIG. 3C Teaches Away from the Proposed Modification

Even assuming *arguendo* that FIG. 3C of applicant's specification constitutes prior art, the cited art still does not render the claims obvious. The Examiner argues that FIG. 3C teaches a 1xEVDO device that does not set a suspend time, which would results in reduced power consumption. Citing the power reduction as the motivation, the Examiner further argues that the combination of FIG. 3C and FIG. 4 obviated claim 3 of present application.

For ease of reference, FIG. 3C is shown below.

FIG. 3C



As shown above, FIG. 3C illustrates a case when the device enters sleep mode for 5.12 second without having a suspend time in the idle mode.

Applicant respectfully asserts that the claimed invention is not obvious in over the cited art in view of United States v. Adams, 86 S. Ct. 708, 713 (1966) and KSR Int'l Co. v. Teleflex, Inc. 127 S. Ct. 1727 (2007). In Adams and KSR, Supreme Court noted that strong indicia of non-obviousness included: (1) the prior art teaches away from the claimed combination of elements and (2) the claimed combination of elements delivers unexpected results.

The Adams case is particularly illustrative. The patent at issue in Adams was directed at a wet battery having a magnesium anode and water electrolyte. At

that time, batteries with zinc anodes were known, and the Government relied on the Wood reference and the Codd reference for its invalidity argument. Wood taught that a magnesium electrode would produce a high voltage cell, which was desirable. However, Wood also taught that magnesium was unsuitable for battery because magnesium was susceptible to corrosion (Adams at 711, 712). Codd likewise suggested that magnesium was a good candidate for anode, but also noted that a battery containing an acid would destroy the magnesium anode (Adams at 712).

The Court held that, **although the advantages of using a magnesium anode were known, the combination of elements including magnesium was not obvious.** The Court took notice that (1) the known disadvantages of using the magnesium anode would dissuade its usage (Adams at 714, citing that water electrolyte used by Adams was “detrimental to the use of magnesium”), and (2) the claimed device “wholly unexpectedly” produced “certain valuable operating advantages over other batteries” (*id.*)

The instant cases mirrors Adams. And as with Adams, the claims of present application are patentable over the cited art. As in Adams, the “prior art” of instant case **teaches away** from the proposed combination. Applicant’s specification at page 14, line 24 states, in reference to FIG. 3C, “Specifically, when the suspend time is not set, a throughput of data communication is deteriorated when the state of the radio wave is not good.” Applicant’s specification thus makes clear that not setting the suspend time was understood by those in the art to deteriorate data communication and thus was to be avoided. Since the **primary purpose of a communication device is to enable communication**, practitioners would not have been motivated to not set a suspend time. And the Office’s stated motivation “conserving battery power” would not have motivated the artisans in the art as in Adams.

Furthermore, as in Adams, the claimed invention produces unexpected and fruitful results contrary to the prior art’s teaching. The inventors of the present invention discovered (among other things) that, in certain operations, not setting

the suspend time would not impact the communication performance. This insight is not seen as obvious from FIG. 3C. In particular, claim 3 recites a condition that the device switches to 1xEVDO when "the second changing section changes the monitoring timing of the first communication protocol by communicating with the base station." In that condition, the device may have a suspend time of zero (not setting the suspend time), and the communication performance would not deteriorate. In parallel, Adam's battery was stable, contrary to the prior art's assertion. As with the instant case, Adams discovered a product with unexpected and fruitful results via insights not seen in the prior art.

The Examiner attacks the importance of the deteriorating communication arising from the zero suspend time, and argues that the deterioration only occurs in poor radio wave condition. However, as the recent storm over the communication performance of iPhone 4 shows, even minor deterioration in communication performance is of grave concern to the users and artisans in the art.

In view of forgoing, applicant submits that FIG. 3C is not prior art, and/or claim 3 is not obviated by FIG. 3C and FIG. 4 of applicant's specification. Thus, the § 103(a) rejections of claim 3 should be withdrawn.

Conclusion

For the foregoing reasons, Appellant submits that claims 3, 4, 7, and 7 are allowable over the art of record.

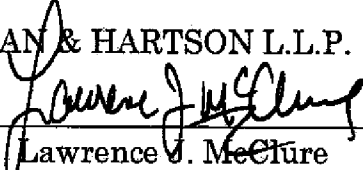
An Appendix containing the appealed claims is attached, and the requisite fees for this Appeal brief and any applicable extensions or other fees due may be charged to our Deposit Account 07-1896.

Respectfully submitted,

HOGAN & HARTSON L.L.P.

Date: October 13, 2010

By: _____


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CLAIMS APPENDIX

3. A wireless communication terminal, which performs wireless communication using each of a first communication protocol and a second communication protocol and enables to be in an idle state with both protocols, comprising:

a setting section that sets a suspend time for detecting an incoming call from a base station using the first communication protocol subsequent to completion of communication with the base station using the first communication protocol;

a first changing section that changes a monitoring timing of the second communication protocol; and

a second changing section that changes a monitoring timing of the first communication protocol by communicating with the base station when the first changing section changes the monitoring timing of the second communication protocol;

wherein the setting section does not set the suspend time after the second changing section changes the monitoring timing of the first communication protocol by communicating with the base station.

4. The wireless communication terminal according to claim 3, wherein the first communication protocol is a 1x Evolution Data Only system, and the second communication protocol is a Code Division Multiple Access 2000 1x system.

7. A wireless communication terminal control method which performs wireless communication using each of a first communication protocol and a second communication protocol and enables to be in an idle state with both protocols, comprising:

changing a monitoring timing of the first communication protocol by communicating with a base station based on a change of a monitoring timing of the second communication protocol, and not setting a suspend time for detecting an

incoming call from the base station using the first communication protocol after the monitoring time of the first communication protocol is changed by communicating with the base station.

8. The wireless communication terminal control method according to claim 7,

wherein the first communication protocol is a 1x Evolution Data Only system, and the second communication protocol is a Code Division Multiple Access 2000 1x system.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.